

**REMARKS**

Claims 1-16 are all the claims pending in the application. By this amendment, claim 1 is amended. In view of the foregoing amendments and following remarks, applicant respectfully requests withdrawal of the rejections, and allowance of the claims.

**I. Allowable Subject Matter; Withdrawn Rejections**

In the Advisory Action, the Examiner has indicated the allowability of claims 5-9 and 13-15, and withdrawn the rejection of claims 1-4 based on Doerr. Applicant thanks the Examiner for providing these indications.

**II. Claim 16**

With respect to claim 16, the Examiner maintains the objection based on an apparent inconsistency between claim 1 and claim 16. Applicant respectfully disagrees with the Examiner's objection for at least the following reasons.

Applicant notes that some switches may be omitted, as explained at page 8, lines 22-32 of the present application. This is one of the novel features of the presently claimed invention. Additionally, as previously explained, claim 1 recites "at most" N dividers, and is thus believed to include "N or less" dividers.

Accordingly, applicant respectfully submits that claim 16 is not believed to be in conflict with claim 1. Thus, applicant respectfully requests withdrawal of the objection to claim 16.

**III. The Examiner has improperly argued Inherency for Claim 12**

Applicant respectfully disagrees with the Examiner's analysis for the pending rejection of claim 12. The Examiner has asserted inherency to support his rejection under 35 U.S.C. § 103(a).

However, applicant respectfully submits that inherency is not an appropriate legal standard to be used in a rejection under 35 U.S.C. § 103(a).

Applicant respectfully reminds the Examiner that inherency is only permissible for use in an anticipation rejection under 35 U.S.C. § 102, which would be inappropriate, as the Examiner has already noted the deficiencies of claim 12. Alternatively, applicant respectfully requests that the Examiner provide a basis for the use of inherency in an obviousness-type rejection.

Therefore, applicant respectfully requests withdrawal of the rejection of claim 12, and allowance thereof.

#### **IV. Claims 1-4 and 10-11 are Novel**

For claims 1-4 and 10-12, the Examiner has maintained the rejection under 35 U.S.C. § 102 based on Shiragaki, i.e., claims 1-4, 10 and 11 stand rejected under 35 USC 102(b) due to alleged anticipation by Shiragaki et al. (USP 6115517). More specifically, the Examiner disagrees with our position regarding inherency, and our technical arguments with respect to (a) operation independent of wavelength as recited in claim 1 and (b) the claimed relationship between P, C and m.

The Examiner indicates that the claim recitation with respect to "configured for packet switching and circuit switching" has not been given patentable weight because of its recitation as a functional use or intended use, and not having a structural difference with respect to the prior art. Applicant has amended the claims in a manner that is believed to address this issue.

With respect to the Examiner's inherency argument, applicant respectfully submits that the foregoing amendment recites this claimed feature in a more structural manner. Based on this

amendment, applicant respectfully maintains that Shiragaki alone fails to disclose or suggest use in packet switching as well as circuit switching, as recited in independent claim 1.

In the Office Action at page 3 and at page 6, the Examiner maintains his position, and further asserts that it is inherent that Shiragaki can be used for packet switching and circuit switching operations. Applicant *maintains* that in view of the requirements MPEP 2112 and the controlling case law of *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981), *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1367, 71 USPQ2d 1081, 1091 (Fed. Cir. 2004), and *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990), applicant respectfully submits that the Examiner has failed to provide the rationale or evidence showing inherency. Accordingly, applicant respectfully requests that the Examiner either demonstrate the required showing, or withdraw the rejection and allow independent claim 1.

Applicant respectfully *maintains* that Shiragaki fails to disclose or even suggest that *the space cross-connect unit is adapted to provide broadcasting of input signals independently of spectral considerations*, as recited in independent claim 1. As explained in the previous response, Shiragaki requires wavelength selectors as described at col. 11 lines 8-10 and lines 43-50 and shown in figure 5. Applicant respectfully submits that Shiragaki teaches units which have similar drawbacks as those discussed on page 2 lines 26-34 of the description in relation to the related art techniques.

Applicant respectfully *maintains* that the claimed output ports are distinguishable from the prior art, because the recited relationship between number P and number C, where C is less than P, is not disclosed or even suggested in the cited prior art. For example, but not by way of limitation, applicant respectfully submits that the Examiner has improperly characterized C as

including multiple elements 521, 531 based on the number of wavelength converters 561. Thus, the number of space switching modules in Shiragaki is undercounted. Applicant respectfully submits that in the cited prior art,  $P$  is equal to  $C$ , which is clearly distinguishable from *a broadcast stage comprising at most  $N$  signal dividers ( $A_i$ ) each having one input and  $C$  outputs where  $C$  is an integer factor of  $P$  less than  $P$* , as recited in claim 1.

Thus, applicant respectfully requests withdrawal of the rejections and allowance of claim 1, as well as claims 2-4 and 10-12, at least by virtue of their dependence from independent claim 1, as well as the reasons explained above for claim 12.

#### **V. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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